

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P333493-840

Luminaire Tested: **S125RDIP-S375D365U840-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333493-840  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125RDIP-S375D365U840-4F0-1E-UDD-F  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 365 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2939.6 lumens  
Efficiency: N/A  
Efficacy: 144.8 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: General Diffuse

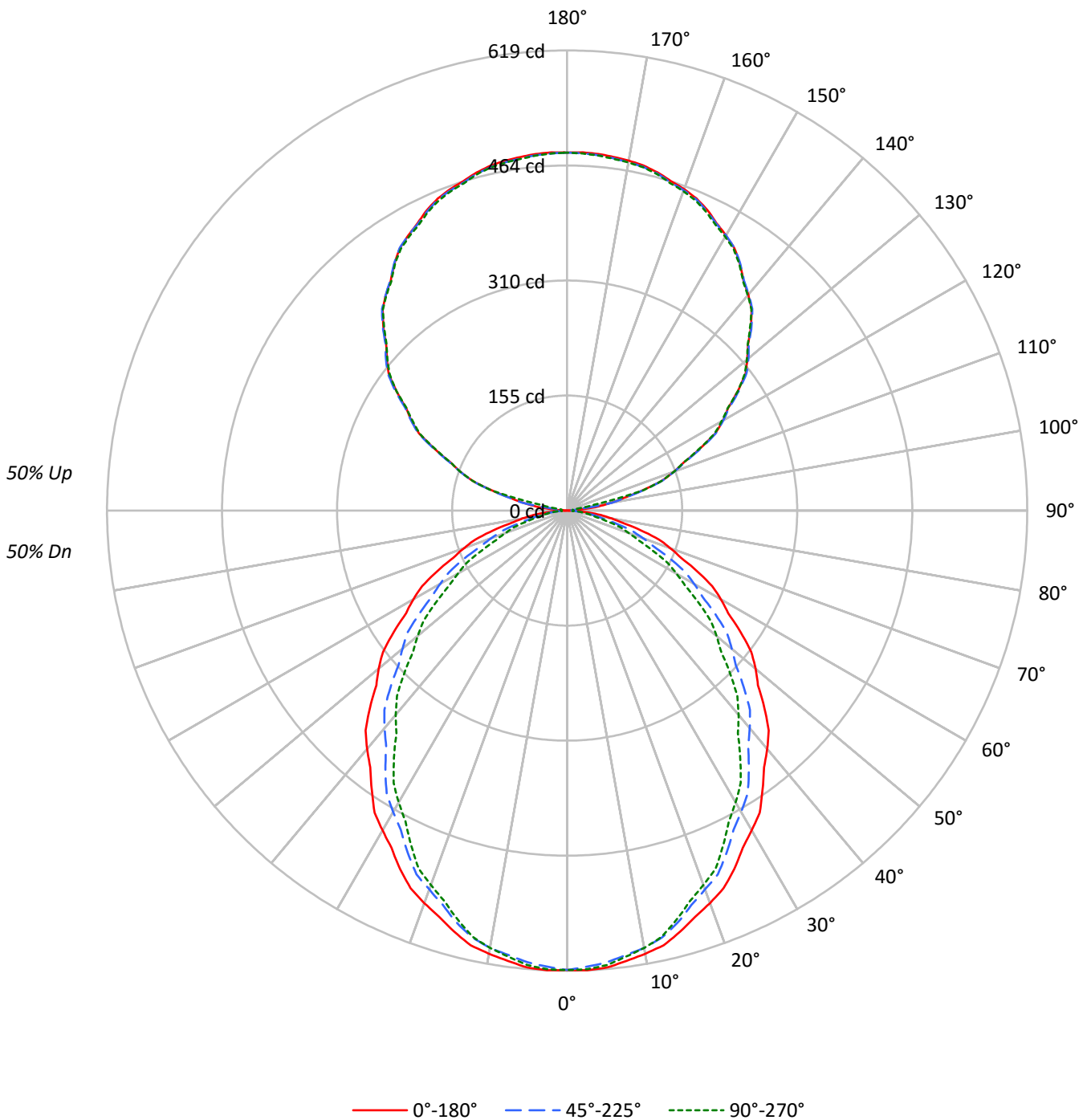
Input Watts (W): 20.3  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20										
RC	80									70									50									30									10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0														
RCR																																						
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50																				
1	98	94	90	86	90	87	83	80	73	71	69	61	59	58	50	49	48	42																				
2	89	82	76	71	82	76	71	66	64	61	57	54	51	49	44	42	40	36																				
3	82	72	65	59	75	67	61	56	57	52	48	48	44	41	39	37	35	31																				
4	75	64	56	50	69	59	53	47	51	46	41	43	39	36	35	32	30	26																				
5	69	57	49	43	63	53	46	41	45	40	36	38	34	31	32	29	26	23																				
6	63	51	43	38	58	48	41	35	41	35	31	35	30	27	29	26	23	20																				
7	59	46	39	33	54	43	36	31	37	32	28	32	27	24	26	23	21	18																				
8	54	42	34	29	50	39	32	28	34	29	25	29	25	22	24	21	19	16																				
9	51	39	31	26	47	36	29	25	31	26	22	27	22	19	22	19	17	15																				
10	47	35	28	23	44	33	27	22	29	24	20	25	21	18	21	18	15	13																				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3991	3991	3991
5°	4000	3955	3979
10°	3970	3918	3918
15°	3922	3839	3807
20°	3862	3727	3682
25°	3792	3619	3539
30°	3703	3491	3380
35°	3613	3360	3202
40°	3530	3222	3026
45°	3428	3070	2834
50°	3325	2903	2635
55°	3206	2743	2423
60°	3086	2550	2195
65°	2946	2326	1932
70°	2783	2045	1665
75°	2563	1724	1385
80°	2258	1354	1164
85°	1904	1104	1037



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.1	2.0
10°-20°	162.4	5.5
20°-30°	235.5	8.0
30°-40°	268.4	9.1
40°-50°	261.6	8.9
50°-60°	220.2	7.5
60°-70°	154.3	5.3
70°-80°	79.3	2.7
80°-90°	21.0	0.7
90°-100°	17.5	0.6
100°-110°	107.8	3.7
110°-120°	195.6	6.7
120°-130°	251.0	8.5
130°-140°	270.0	9.2
140°-150°	253.4	8.6
150°-160°	205.0	7.0
160°-170°	132.6	4.5
170°-180°	45.7	1.6
0°-30°	456.0	15.5
0°-40°	724.3	24.6
0°-60°	1206.1	41.0
0°-90°	1460.8	49.7
90°-120°	321.0	10.9
90°-150°	1095.4	37.3
90°-180°	1479.0	50.3
0°-180°	2939.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	618	618	618	618	618	
5°	617	615	610	614	614	58
15°	587	584	574	573	569	165
25°	532	524	508	502	497	245
35°	458	447	426	413	406	287
45°	375	361	336	318	310	289
55°	285	269	244	223	215	255
65°	193	176	152	134	126	191
75°	103	88	69	59	56	109
85°	26	18	15	14	14	29
90°	0	3	6	7	9	2
95°	20	19	6	7	8	26
105°	105	106	106	106	106	111
115°	197	199	199	198	196	195
125°	280	283	283	281	280	250
135°	350	351	351	350	348	269
145°	405	406	406	406	404	253
155°	446	444	445	446	443	206
165°	471	469	469	471	468	133
175°	482	480	480	482	479	46
180°	482	482	482	482	482	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9
2.5°	619.0	618.8	618.5	618.3	618.0	617.5	616.7	615.8	615.0	614.2	615.0
5°	617.0	616.6	616.2	615.7	615.3	614.6	613.4	612.3	611.2	610.0	611.1
7.5°	611.0	610.6	610.2	609.8	609.4	608.4	607.1	605.7	604.4	603.0	603.7
10°	605.3	605.0	604.7	604.4	604.1	603.2	601.8	600.3	598.8	597.4	597.7
12.5°	599.0	598.5	598.2	597.8	597.4	596.2	594.3	592.4	590.4	588.4	588.7
15°	586.6	586.0	585.4	584.8	584.2	582.8	580.6	578.5	576.2	574.1	574.0
17.5°	572.8	571.8	570.9	569.9	569.0	567.1	564.3	561.6	558.9	556.1	555.6
20°	561.9	560.9	559.9	558.9	557.7	555.6	552.3	549.0	545.6	542.3	541.8
22.5°	550.0	549.0	548.0	546.8	545.8	543.6	540.1	536.6	533.1	529.7	528.7
25°	532.1	530.5	529.0	527.4	525.8	523.1	519.3	515.4	511.6	507.8	506.4
27.5°	511.5	509.7	507.8	505.8	503.9	501.0	496.9	492.7	488.7	484.5	482.6
30°	496.6	494.6	492.6	490.7	488.7	485.5	481.2	476.9	472.5	468.1	465.7
32.5°	482.0	479.7	477.5	475.1	472.8	469.5	465.0	460.6	456.2	451.7	449.1
35°	458.3	455.9	453.3	450.8	448.4	444.7	440.1	435.5	430.8	426.2	423.1
37.5°	435.0	432.0	429.0	426.0	422.9	419.0	414.2	409.4	404.7	399.8	396.2
40°	418.7	415.6	412.4	409.3	406.2	402.1	397.2	392.2	387.2	382.2	378.3
42.5°	401.4	398.3	395.1	391.9	388.7	384.6	379.4	374.3	369.1	364.0	360.2
45°	375.3	372.2	369.2	366.2	363.2	358.8	353.1	347.5	341.7	336.1	331.8
47.5°	348.1	344.9	341.7	338.5	335.4	330.9	325.2	319.4	313.7	307.9	303.7
50°	330.9	327.5	324.1	320.6	317.2	312.6	306.6	300.7	294.8	288.9	284.6
52.5°	312.3	308.7	305.2	301.7	298.2	293.7	288.1	282.5	276.9	271.4	266.7
55°	284.7	281.3	278.0	274.8	271.5	266.9	261.1	255.2	249.4	243.6	238.9
57.5°	256.9	253.4	249.7	246.2	242.7	238.1	232.5	226.9	221.4	215.7	211.2
60°	238.9	235.3	231.7	228.0	224.4	219.8	214.2	208.6	203.0	197.4	192.9
62.5°	219.9	216.4	213.0	209.5	206.0	201.5	195.8	190.2	184.4	178.7	174.5
65°	192.8	189.2	185.7	182.2	178.6	174.1	168.6	163.2	157.6	152.2	148.0
67.5°	165.8	162.3	158.8	155.2	151.7	147.2	142.0	136.7	131.5	126.2	122.4
70°	147.4	144.0	140.5	136.9	133.4	129.1	123.8	118.7	113.5	108.3	105.0
72.5°	129.6	126.1	122.7	119.3	115.8	111.6	106.7	101.9	97.0	92.2	89.3
75°	102.7	99.6	96.4	93.3	90.3	86.5	82.1	77.8	73.4	69.1	66.8
77.5°	75.9	73.5	71.0	68.5	66.0	63.0	59.6	56.0	52.6	49.1	47.5
80°	60.7	58.2	55.7	53.2	50.7	48.1	45.1	42.2	39.3	36.4	35.4
82.5°	45.7	43.5	41.3	39.0	36.8	34.6	32.7	30.7	28.7	26.7	26.3
85°	25.7	23.8	21.9	20.1	18.2	17.0	16.5	16.0	15.5	14.9	14.8
87.5°	8.7	8.2	7.8	7.3	6.9	6.7	6.7	6.7	6.7	6.8	6.9
90°	0.4	1.0	1.6	2.2	2.9	3.5	4.0	4.6	5.2	5.8	6.1
92.5°	5.5	5.0	4.6	4.1	3.7	3.7	4.2	4.7	5.3	5.8	6.1
95°	20.3	20.1	19.9	19.6	19.4	17.8	14.7	11.7	8.7	5.8	6.1
97.5°	42.5	42.9	43.3	43.7	44.2	41.4	35.4	29.5	23.5	17.6	15.3
100°	59.6	59.9	60.1	60.3	60.6	60.8	61.2	61.5	61.8	62.1	50.3
102.5°	77.1	77.4	77.7	78.0	78.3	78.5	78.7	78.9	79.1	79.3	77.1
105°	104.9	105.2	105.6	105.9	106.2	106.3	106.3	106.3	106.3	106.3	106.3
107.5°	133.9	133.9	133.9	133.9	133.9	134.0	134.2	134.3	134.5	134.6	134.6
110°	152.8	152.8	152.8	152.8	152.8	152.9	153.0	153.2	153.3	153.5	153.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	170.5	170.7	170.9	171.1	171.3	171.4	171.5	171.6	171.7	171.8	171.5
115°	197.0	197.4	197.8	198.2	198.6	198.8	198.9	199.0	199.1	199.1	198.8
117.5°	224.5	224.5	224.5	224.5	224.5	224.6	224.9	225.2	225.5	225.8	225.4
120°	241.7	241.6	241.6	241.5	241.4	241.5	241.7	241.9	242.2	242.4	242.3
122.5°	256.8	257.1	257.4	257.7	258.0	258.2	258.3	258.4	258.5	258.6	258.5
125°	280.2	280.7	281.3	281.9	282.5	282.8	282.8	282.8	282.8	282.8	282.4
127.5°	302.6	303.0	303.4	303.8	304.2	304.4	304.3	304.3	304.2	304.2	304.0
130°	316.3	316.7	317.1	317.5	317.9	318.1	318.2	318.2	318.3	318.4	318.2
132.5°	330.0	330.4	330.9	331.3	331.8	331.9	331.8	331.6	331.4	331.2	331.2
135°	349.5	349.9	350.4	350.9	351.3	351.5	351.3	351.2	351.0	350.9	350.7
137.5°	367.4	367.8	368.2	368.6	369.0	369.2	369.0	368.9	368.7	368.6	368.6
140°	379.1	379.3	379.4	379.6	379.7	379.8	379.7	379.6	379.5	379.5	379.6
142.5°	389.7	389.8	389.9	389.9	390.0	390.1	390.3	390.4	390.5	390.6	390.6
145°	405.2	405.4	405.5	405.7	405.8	405.9	405.9	405.9	405.9	405.9	406.0
147.5°	418.7	418.7	418.7	418.6	418.6	418.6	418.7	418.8	418.9	419.0	419.1
150°	427.3	427.2	427.0	426.8	426.7	426.7	426.8	427.0	427.2	427.3	427.5
152.5°	435.6	435.3	434.8	434.5	434.1	434.0	434.2	434.4	434.5	434.7	434.8
155°	446.3	445.8	445.2	444.7	444.3	444.1	444.3	444.4	444.6	444.7	445.0
157.5°	454.4	454.1	453.8	453.5	453.3	453.1	453.1	453.2	453.2	453.2	453.4
160°	460.1	459.7	459.2	458.7	458.3	458.1	458.1	458.2	458.3	458.4	458.7
162.5°	464.7	464.2	463.7	463.2	462.8	462.6	462.7	462.7	462.8	462.9	463.3
165°	470.8	470.4	469.9	469.4	469.0	468.8	468.8	468.9	469.0	469.1	469.5
167.5°	475.4	474.9	474.4	473.9	473.4	473.2	473.3	473.4	473.5	473.5	474.1
170°	478.0	477.5	476.9	476.4	475.7	475.5	475.6	475.6	475.7	475.8	476.5
172.5°	479.7	479.2	478.6	478.1	477.5	477.3	477.4	477.6	477.7	477.9	478.4
175°	481.5	481.1	480.6	480.1	479.7	479.5	479.5	479.6	479.7	479.8	480.4
177.5°	482.4	482.0	481.6	481.3	480.9	480.7	480.8	480.9	480.9	481.0	481.4
180°	481.5	481.5	481.5	481.5	481.5	481.5	481.5	481.5	481.5	481.5	481.5



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9
2.5°	615.8	616.7	617.5	617.9	617.8	617.7	617.6	617.5
5°	612.1	613.1	614.1	614.6	614.4	614.1	613.9	613.7
7.5°	604.4	605.2	605.9	606.1	605.9	605.7	605.5	605.2
10°	598.0	598.3	598.6	598.6	598.3	598.0	597.7	597.4
12.5°	588.9	589.2	589.4	589.3	588.8	588.2	587.8	587.3
15°	573.8	573.7	573.6	573.1	572.2	571.3	570.4	569.4
17.5°	555.1	554.6	554.1	553.4	552.7	551.9	551.1	550.4
20°	541.3	540.8	540.3	539.6	538.6	537.7	536.7	535.8
22.5°	527.6	526.5	525.5	524.6	523.9	523.1	522.4	521.6
25°	505.1	503.7	502.4	501.2	500.0	498.9	497.8	496.6
27.5°	480.8	478.9	477.0	475.5	474.4	473.3	472.2	471.1
30°	463.3	461.0	458.6	457.0	456.0	455.0	454.1	453.2
32.5°	446.5	443.8	441.1	439.3	438.1	436.9	435.7	434.5
35°	420.1	417.1	414.0	411.8	410.4	409.0	407.5	406.1
37.5°	392.5	389.0	385.4	382.8	381.4	380.0	378.6	377.2
40°	374.4	370.4	366.5	363.9	362.6	361.4	360.1	358.9
42.5°	356.4	352.6	348.8	346.1	344.3	342.3	340.5	338.7
45°	327.7	323.6	319.4	316.6	315.1	313.5	311.9	310.3
47.5°	299.4	295.1	290.8	287.8	286.1	284.4	282.7	280.9
50°	280.1	275.8	271.5	268.5	267.0	265.4	263.9	262.3
52.5°	262.0	257.3	252.6	249.4	247.9	246.4	244.8	243.3
55°	234.3	229.6	225.0	221.8	220.2	218.4	216.8	215.2
57.5°	206.6	202.1	197.4	194.4	193.0	191.5	190.1	188.5
60°	188.3	183.7	179.2	176.1	174.5	173.0	171.5	169.9
62.5°	170.3	166.0	161.8	159.0	157.3	155.8	154.3	152.7
65°	143.8	139.7	135.5	132.7	131.2	129.6	128.1	126.4
67.5°	118.6	114.8	111.0	108.5	107.2	106.0	104.7	103.5
70°	101.9	98.7	95.4	93.2	91.9	90.7	89.5	88.2
72.5°	86.2	83.3	80.4	78.5	77.7	76.9	75.9	75.1
75°	64.5	62.2	60.0	58.5	57.8	57.0	56.2	55.5
77.5°	45.9	44.3	42.7	41.6	41.1	40.6	40.0	39.5
80°	34.5	33.6	32.7	32.1	31.9	31.7	31.5	31.3
82.5°	25.9	25.3	24.9	24.6	24.5	24.4	24.3	24.1
85°	14.7	14.6	14.5	14.4	14.3	14.2	14.1	14.0
87.5°	6.9	7.0	7.1	7.1	7.1	7.0	7.0	7.0
90°	6.5	6.9	7.3	7.6	7.9	8.1	8.3	8.6
92.5°	6.5	6.9	7.3	7.6	7.7	7.8	7.9	8.0
95°	6.5	6.9	7.3	7.5	7.5	7.5	7.5	7.5
97.5°	13.1	10.8	8.6	7.5	7.5	7.5	7.5	7.5
100°	38.5	26.7	14.8	8.8	8.5	8.2	7.8	7.5
102.5°	74.7	72.5	70.3	66.4	61.1	55.7	50.3	44.9
105°	106.3	106.3	106.3	106.3	106.2	106.1	106.1	106.0
107.5°	134.7	134.7	134.7	134.6	134.4	134.1	133.9	133.6
110°	153.0	152.8	152.6	152.5	152.6	152.6	152.7	152.8





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CATALOG NUMBER: S125RDIP-S375D365U840-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	171.2	170.9	170.6	170.4	170.3	170.2	170.1	170.0
115°	198.5	198.2	197.9	197.5	197.0	196.6	196.1	195.6
117.5°	225.0	224.6	224.2	223.9	223.7	223.5	223.3	223.1
120°	242.1	241.9	241.8	241.5	241.1	240.7	240.2	239.8
122.5°	258.3	258.2	258.0	257.7	257.2	256.8	256.3	255.9
125°	282.1	281.8	281.4	281.1	280.9	280.7	280.4	280.2
127.5°	303.8	303.6	303.5	303.1	302.5	301.8	301.3	300.7
130°	317.9	317.7	317.5	317.1	316.8	316.4	316.0	315.6
132.5°	331.1	331.1	331.0	330.8	330.4	330.0	329.6	329.3
135°	350.6	350.4	350.2	349.9	349.5	349.0	348.5	348.0
137.5°	368.7	368.7	368.7	368.5	368.1	367.7	367.3	366.9
140°	379.8	379.9	380.1	379.9	379.5	379.0	378.5	378.0
142.5°	390.6	390.7	390.7	390.5	390.0	389.5	389.1	388.6
145°	406.1	406.1	406.2	406.0	405.6	405.1	404.6	404.0
147.5°	419.2	419.3	419.4	419.2	418.6	418.0	417.5	416.9
150°	427.6	427.8	427.9	427.7	427.1	426.5	425.8	425.2
152.5°	435.0	435.2	435.4	435.2	434.5	434.0	433.4	432.8
155°	445.2	445.5	445.8	445.6	444.9	444.2	443.6	443.0
157.5°	453.7	453.9	454.2	454.0	453.4	452.7	452.1	451.5
160°	459.0	459.3	459.6	459.5	458.8	458.2	457.6	457.0
162.5°	463.8	464.2	464.7	464.5	463.8	463.1	462.5	461.8
165°	470.0	470.5	471.0	470.9	470.3	469.6	469.0	468.4
167.5°	474.7	475.2	475.8	475.7	475.0	474.3	473.6	472.9
170°	477.1	477.8	478.4	478.4	477.7	477.0	476.2	475.4
172.5°	479.0	479.6	480.1	480.1	479.4	478.6	477.9	477.2
175°	481.0	481.7	482.3	482.3	481.5	480.8	480.1	479.4
177.5°	481.9	482.3	482.7	482.7	482.2	481.7	481.2	480.7
180°	481.5	481.5	481.5	481.5	481.5	481.5	481.5	481.5

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